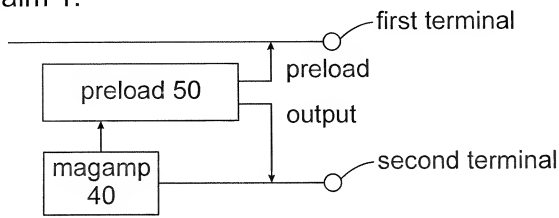
REMARKS

The various claims have been rejected under 35 USC 102 or 35 USC 103 in view of Wright. The following discussion will center on claim 1, as the other independent claim, claim 16, is directed to the power supply of claim 1 in a printing context.

As previously amended, claim 1 recites that the secondary circuit includes a post regulator circuit including a magnetic amplifier (magamp) controller; and that a preload circuit applies a preload on the main circuit as a result of the secondary circuit going out of control, with the preload circuit including an output directly to the second terminal and an input from the magamp controller.

Below is a diagram of the elements recited in claim 1; this is a simplified version of Figure 2 as filed and as described in the Specification at page 4, lines 24-27. The preload circuit receives an **input** from the magamp controller, and, as claimed, outputs to **both** the first and second terminal.

Claim 1:



An explanation of the advantages of the claimed system is found in the Specification as filed at page 5, lines 2-10 (emphases added):

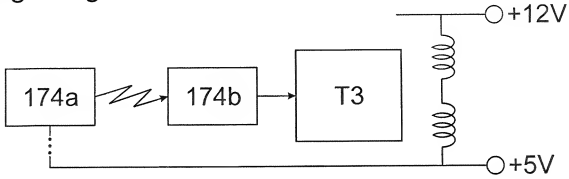
> The overall function of preload circuit 50 is to apply a **preload on the main circuit in case the secondary circuit goes out of control.** This preload helps the secondary output in two ways: the extra **preload on the first output terminal 20** increases the

> voltage on the secondary transformer winding 40, and the extra preload current of the first output terminal **is fed into the second output terminal 22 and therefore not lost.** In this way, a condition in which a low load is experienced by the main circuit while a high load is experienced by the secondary circuit **does not result in an out of control situation for the secondary circuit.**

The rejection states the Figure 3 embodiment of Wright distinguishes itself from the magamp-based controller shown in Figure 1B of Wright; but the use of a magamp controller, as in the claimed invention, would have been obvious based on the disclosure of the magamp controller 40 in Figure 1B of Wright.

With regard to the Figure 3 embodiment of Wright, the embodiment describes a "coupled-inductor topology" which is utterly different from the claimed invention. The passage in Wright cited in the rejection, column 9, lines 22-67, describes a system in which the +5V output terminal is controlled via a loop, through resistor 172 and optocouplers 174a, 174b, to the *input* side of a transformer T3, as shown in this simplified version of Wright Fig. 3.

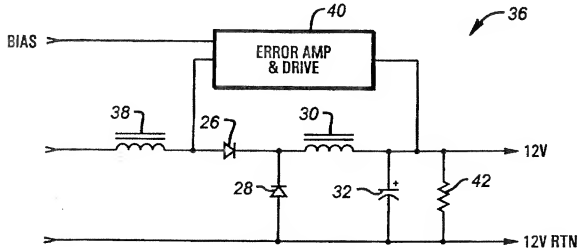
Wright Fig. 3:



With a coupled-inductor topology, because the two outputs share the same transformer output coil, there can be no true independence between the outputs of the main and secondary terminals: each output voltage changes when the load on the other output changes. At the very least, this disclosure is simply

unrelated to a *magamp* control of the *secondary circuit*, and a person of skill in the art would see no teaching relevant to the claimed invention.

The Figure 1B embodiment of Wright indeed describes a magamp control 40, but the magamp control is simply used as a direct feedback loop involving the *main circuit only*.



(PRIOR ART)

FIG. 1B

While Figure 1B of Wright shows generally that a magamp controller is one type of approach for controlling a two-output power supply, there is no teaching of using a magamp control to overcome the "out-of-control" situations that may be experienced by the *secondary circuit*, as recited in claim 1. In short, the feedback loop of Figure 1B of Wright simply shows magamp control of *one* output; while claim 1 recites an effective magamp control of *both* outputs.

The claimed invention goes beyond anything disclosed or suggested by any embodiment in Wright. As recited in claim 1, the preload circuit applies a preload on the main circuit as a result of the secondary circuit going out of control (as that term is explicitly defined in the Specification) as detected via a magamp controller. The Figure 3 embodiment of Wright is simply a totally different type of control system, which outputs a control signal from the secondary output to a

transformer *shared* by *both* outputs (a teaching away from any "out-of-control" recitation in claim 1). The Figure 1B embodiment shows a magamp as a basic tool used in control systems, but its use in Wright is directed to the *main* circuit only. The claimed invention relies on a magamp control of the *secondary* circuit to influence *both* the main and secondary outputs in a specific, recited way.

For these reasons, teachings form the respective embodiments can in no way be combined to render the invention of claim 1 obvious. Claim 1 and its dependent claims 7-11 are therefore deemed allowable.

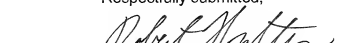
Claims 16-20 have been rejected over Wright in view of Chapman; Chapman shows the use of a power supply in a printer. Claim 16, from which claims 17-20 are dependent, has been amended to conform to the limitations of claim 1 as amended above, and is therefore deemed allowable, along with its dependent claims.

The claims are therefore in condition for allowance.

No additional fee is believed to be required for this amendment; however, the undersigned Xerox Corporation attorney authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he is hereby requested to call the undersigned attorney at (585) 423-3811, Rochester, NY.

Respectfully submitted,



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